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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,945	04/19/2001	Jen-Hui Tsai	55841 (71987)	4090

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EDWARDS & ANGELL, LLP  
P.O. BOX 9169  
BOSTON, MA 02209

EXAMINER

HARVEY, DIONNE

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 06/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/839,945

Applicant(s)  
Tsai

Examiner  
Dionne Harvey

Art Unit  
2643



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

Art Unit: 2643

## DETAILED ACTION

### *Drawings*

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 U.S.C. § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1,2 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. Lines 8-9 of claim 1 recite "...a mounting opening formed in the sound box, which connects one of the air chambers." Should the claim recite, "the mounting opening formed in the sound box, which is connected to one of the air chambers" ? Should the claim recite, "the mounting opening formed in the sound box, which connects one of the air chambers to the atmosphere" ? What is the air chamber connected to? Clarification is required.

Art Unit: 2643

2. Line 2 of claim 2 recites "...mounting opening which connects the first air chamber of the sound box." What is the mounting opening connected to? Clarification is required.

3. Claim 4 recites the limitation "the dividers" in line 2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 U.S.C. § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Balogh (US 4,054,748)

Regarding claim 1, shown in figure 4, Balogh teaches a speaker system, comprising: a sound box having an interior divided into a plurality of air chambers (*Co2, Co3, Co4*), each air chamber being formed with an air passing hole (*mc-rc, m'c-r'c*) connecting at least a neighboring air chamber and at least an air dissipating hole (*R2M2, R3M3, R4M4*) connecting the atmosphere; and a speaker (*ZIMI*) retained in a mounting opening (shown, but not labeled) formed in the sound box which connects one of the air chambers.

Art Unit: 2643

Regarding claim 2, Balogh teaches that the speaker(*ZIMI*) is retained in a mounting opening which connects the first air chamber (*Co2*) of the sound box.

Regarding claim 3, Balogh teaches that the interior of the sound box is provided with a plurality of dividers (shown in figure 4, but not labeled) for the formation of air chambers, and the air passing hole (*mc-rc*, *m'c-r'c*) of each of the air chambers for connecting the neighboring air chamber is formed on each divider.

Regarding claim 4, Balogh teaches that the dividers are parallelly arranged in the sound box.

***Claim Rejections - 35 U.S.C. § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniel (US 4,398,619) in view of Taso (US 5,576,522).

Regarding claim 1, shown in figures 2-3, Daniel teaches a speaker system, comprising: a sound box having an interior divided into a plurality of air chambers (*32,34,36*), each air chamber being formed with an air passing hole (*22,26*) connecting at least a neighboring air chamber and

Art Unit: 2643

one chamber formed with an air dissipating hole (30) connecting the atmosphere. Daniel does not specifically teach that each chamber of the sound box is formed with at least an air dissipating hole connecting the atmosphere.

In figures 7-9, also see figures 3A, 5 and 6, Taso teaches a speaker cabinet wherein the chamber of the sound box (1) is formed with at least an air dissipating hole connecting the atmosphere (*in figures 7-9, see hole 16 and the small air dissipating hole of element 12; in figures 3a, 5 and 6, see holes 25, 41 and 42*).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Daniel and Taso, for the purpose of providing openings which act as vents for allowing air to go in and out of the speaker chamber and for also improving the sensitivity of the speaker at low frequencies.

Regarding claim 2, Daniel teaches that the speaker(14) is retained in a mounting opening which connects the first air chamber (32) of the sound box.

Regarding claim 3, Daniel teaches that the interior of the sound box is provided with a plurality of dividers (18,20) for the formation of air chambers, and the air passing hole (22,26) of each of the air chambers for connecting the neighboring air chamber is formed on each divider.

Regarding claim 4, Daniel teaches that the dividers are parallelly arranged in the sound box.

Art Unit: 2643

***Conclusion***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statements for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne Harvey whose telephone number is (703) 305-1111. The examiner can normally be reached on Monday through Friday from 8:30am to 6:00pm.

**Any responses to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, DC 20231

**or faxed to:**

(703) 308-6306, for formal communications for entry

**Or:**

(703) 308-6296, for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor(Receptionist)


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached at (703) 305-4708.

Art Unit: 2643

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne Harvey whose telephone number is (703) 305-1111.

D.H.

June 9, 2003

  
CURTIS KUNTZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2500